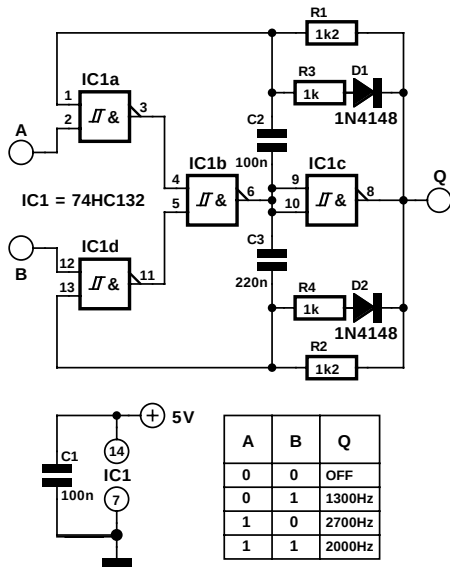


3-frequency oscillator

045



A	B	Q
0	0	OFF
0	1	1300Hz
1	0	2700Hz
1	1	2000Hz

G. Kleine

The output frequency of the oscillator shown in the diagram may be derived via two control inputs, A and B, and may, therefore, have three different values. If the logic level at both inputs is low, the oscillator is disabled.

The oscillator proper is formed by gate IC_{1c}. Depending on whether a high logic level is applied to IC_{1a} or IC_{1b}, either network R₁-C₂ or network R₂-C₃ determines the output frequency. If both inputs are high, the output frequency is somewhere between the other two. With values as indicated, the output frequencies are 1300 Hz, 200 Hz, and 2700 Hz.

Branches R₃-D₁ and R₄-D₂ ensure that the pulse duty ratio of the output signal is 1:1. If the oscillator is to be used in applications where this ratio is irrelevant, the two branches may be omitted.

The oscillator is particularly suitable for use in frequency shift keying modulators.

[994023]